

# Session 11: Merger/Acquisition and Purchase Accounting

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SOCIETY OF ACTUARIES

## M&A Process Overview – Before the Close

- M&A drivers
- Preparing to sell
- Pre-marketing – identify possible buyers
- Marketing
- Preparing materials
- Evaluating the opportunity on the sell side
- Selecting final candidates
- Due diligence
- Final bids & negotiations
- The path to closing – regulatory, boards, sales force, shareholders



SOCIETY OF ACTUARIES

## M&A Drivers

- Need to grow
- Integration – access to producers or customers
- Diversification
- Geographic expansion
- Regulation – enter a region or buy a shell



## Preparing to Sell – Assemble the Team

- Investment bankers – team leader
  - Organization
  - Process
  - Financial structure
  - Negotiations
- Lawyers
- Accountants
- Actuaries



## Pre-Marketing – Identify Possible Buyers

- Size
- Strength
- Channel conflict
  - e.g., a company that relies on independent brokers or agents may alienate these people if it acquires company with captive sales force.



## Preparing Materials

- “Teaser” document
- Confidentiality agreement
- Bid process
- Actuarial appraisal
- Review room, physical or virtual



## Evaluating Prospects from the Sell Side

- Must show financial strength
- Track record in M&A
- Regulatory barriers
- Preliminary bid
- Select final candidates



## Due Diligence

- 3–6 weeks to confirm
- Create buyer's appraisal; including PGAAP
- Integration team appears
- Confirm value
  - Strategic
  - Financial
  - Operational



## Due Diligence – Construction of Final Bid

- Price =
- + Buyer's appraisal
  - + Value for strategies, synergies, hidden values, marginal expenses
  - Fixes, volatility, unknowns, costs of acquisition, costs of integration



## Final Bids & Negotiations

- Exclusive time period
- Office relocation
- Utilization of staff
- Employment agreements



## Path to Closing

- Regulators
- Rating agencies
- Boards
- Sales force
- Shareholders



## Recent Life Company Transactions – GAAP

| Year | Buyer            | Acquired Unit    | Price/<br>Earnings | Price/<br>Book |
|------|------------------|------------------|--------------------|----------------|
| 2001 | AIG              | American General | 17.5               | 2.7            |
| 2002 | Sun Life         | Clarica          | 16.8               | 1.7            |
| 2003 | Manulife         | John Hancock     | 12.4               | 1.3            |
| 2005 | Lincoln National | Jefferson Pilot  | 13.4               | 1.9            |
| 2005 | Met Life         | Travelers        | 12.8               | 1.3            |
| 2006 | Protective       | Chase            | 12.4               | 1.6            |



## M&A Process Overview – After the Close

- Financing
- Close books at purchase date
- Preparation of new financial statements
  - Statutory
  - Tax
  - GAAP
- Integration



## Financing – Common Sources

- Venture capital
- Initial public offering
- Public security offerings
- Shelf registrations
- Banks
- Private placements
- Private equity
- Seller financing
- Reinsurance



## Integration

- Corporate integration unit
- Personnel, systems and location consolidators
- New culture



## Accounting

- Out with Historical GAAP (HGAAP)
- In with Purchase GAAP (PGAAP)



## Purchase Accounting Background

- Prior guidance
  - *APB Opinion No. 16* and *17*, Business Combinations and Intangible Assets
- FASB released two pronouncements in 2001
  - *SFAS No. 141*, Business Combinations
  - *SFAS No. 142*, Goodwill and Other Intangible Assets



## Basic PGAAP Process

- Setting up the PGAAP balance sheet
  - Determine who is the acquirer and the purchase price
  - Record price as contributed capital (equity)
  - Revalue all assets and liabilities to fair value
  - Goodwill is the balancing item



## Purchase Price Allocation

- Assign fair value to all financial assets
  - Marketable securities at current market prices
  - Appraised value for illiquid investments
  - Real estate at appraised value
- Establish fair value of liabilities
- Going forward your costs are assigned to an SFAS
  - Never FV again
- Provide deferred taxes on all book/tax differences



## Purchase Price Allocation (continued)

- Identify and assign fair values to certain assets (i.e. brand name, distribution channel, state licenses)
- Excess purchase price is allocated to goodwill
  - Goodwill may = \$0 in a favorable deal
- If there is a deficit ( $PP - (FVA - FVL) < 0$ )
  - Double check to make sure you are right
  - Reduce identifiable intangibles pro rata
  - If  $PP - (FVA - FVL) < 0$  after writing intangibles to zero, remainder is recognized as extraordinary gain (rare with insurance companies)



## PGAAP Reserves

- Fair value of liabilities – common practice has been:
  - *SFAS 60* Recalculate with current assumptions
  - *SFAS 97* No change from seller's basis (i.e., AV)
  - *SFAS 120* No change from seller's basis (i.e., NLP reserve using dividend basis)
    - Restate reserves for bonuses, unearned revenue, and premium deficiencies as needed



## PGAAP Reserves: *SFAS 60*

- Method requires a starting point, setting either:
  - Net-to-gross ratio (“defined valuation premium method”, DVPM)
  - Beginning reserve (“defined initial reserve method,” or DIRM)
- Guidance in American Academy of Actuaries Interpretation 1-D, as described in *GAAP Textbook*
- Other simplified methods may be acceptable



## PGAAP Reserves: DVPM

- Select a net-to-gross premium ratio ( $n/g\%$ )
  - Consistent with the ratio for new business
- PGAAP reserves equal:
  - $PV(\text{benefits \& expense}) - PV(\text{valn. net prem})$
  - Valuation net premium equals  $n/g\% \times \text{gross prem}$



## PGAAP Reserves: DIRM

- Select an initial reserve amount
  - HGAAP reserve or statutory
- PGAAP reserves equal
  - $PV(\text{benefits \& expense}) - PV(\text{valn. net prem})$
  - Valuation net premium equals  $n/g\% \times \text{gross prem}$
  - Solve for  $n/g\% = [PV(\text{benefits \& exp}) - \text{initial reserve}] / PV(\text{gross premium})$



## PGAAP Reserves: Assumptions

- Recalculate reserves with current assumptions, post-acquisition
  - Interest – reflect asset revaluation at fair value
  - Decrements – reflect current and expected experience, including actions to be taken
  - Expenses – reflect administration changes, if any
- Include PADs for *SFAS 60*, not *97* and *120*
- Assumptions are from the acquirer's perspective
- Assumptions used to determine reserves and VOBA must be internally consistent



## Initial VOBA

- Follows determination of reserves
- No specific guidance exists for the initial VOBA
  - Common interpretation: VOBA is another component of reserves, like a contra-liability, not simply an intangible asset
- Does not include value of new business
- Block purchase – generally no goodwill
  - Fair value changes to assets and liabilities flow to VOBA and deferred tax
- Company purchase – Initial VOBA must be calculated, then solve for goodwill



## Initial VOBA (continued)

- Common Methods:
  - DIRM / DVPM – often for *SFAS 60* business only
  - ROI Methods – often for *SFAS 97* and *SFAS 60*, maybe *SFAS 120*
  - Appraisal Method – for any business
- Actuarial Appraisal Method (AAV) is another industry practice



## VOBA: Common Methods

- ROI Method
  - Initial VOBA = PV future GAAP profits
  - Projected GAAP earnings reflect change in PGAAP reserves, investment income at market rates, excluding DAC or VOBA amortization
  - Discount at risk rate of return



## VOBA: Common Methods

- Actuarial Appraisal Value Method
  - Initial VOBA tied to actuarial appraisal used in determining purchase price
  - PV distributable earnings
    - Value of inforce business only
    - Includes cost of capital
    - Reflect reserve and asset differences, appraisal basis vs. PGAAP basis
  - VOBA under AAV similar to embedded value



## VOBA: Fundamental Equation

- $FVIA + VOBA = FVL + DTL + \text{Price}$ 
  - FVIA fair value of investments funding policy obligations and surplus
  - VOBA the only intangible asset in the example
  - FVL fair value of liabilities
  - DTL deferred tax liability



## Actuarial Appraisal Value Method

- VOBA =  
Appraisal value of inforce + (PGAAP reserve – stat reserve) +  
(stat inv assets – PGAAP invested assets) + DTL
- DTL =  
35% [(Tax resv – PGAAP reserve) + (PGAAP inv assets – tax  
inv assets) + (VOBA-proxy DAC)]



## VOBA Example: Background

- Company purchase, additional consideration paid
- No intangibles other than VOBA and goodwill
- Assume no stat/tax differences, ignore proxy DAC, and tax rate = 35%
- Price = 1,778

|                                  |       |            |
|----------------------------------|-------|------------|
| Statutory C&S                    |       | 1,000      |
| Appraisal Value of inforce (AAV) |       |            |
| PV book profits                  | 686   |            |
| Less cost of capital             | (508) | 178        |
| Additional amount                |       | <u>600</u> |
| Total price                      |       | 1,778      |



## VOBA Example 1: ROI Method

- Discounted GAAP profits = 1,055, consistent with appraisal value assumptions and discount rate
- PGAAP Balance Sheet

|                 |           |              |              |
|-----------------|-----------|--------------|--------------|
| Invested Assets | 11,000    | Reserves     | 10,000       |
| VOBA            | 1,055     | Deferred Tax | 369          |
| Goodwill        | <u>92</u> | Equity       | <u>1,778</u> |
| Total Assets    | 12,147    | Total Liabs  | 12,147       |



## VOBA Example 1: AAV Method

- Appraisal value of inforce = 178
- VOBA = 274, DTL = 96
- PGAAP Balance Sheet

|                 |            |              |              |
|-----------------|------------|--------------|--------------|
| Invested Assets | 11,000     | Reserves     | 10,000       |
| VOBA            | 274        | Deferred Tax | 96           |
| Goodwill        | <u>600</u> | Equity       | <u>1,778</u> |
| Total Assets    | 11,874     | Total Liabs  | 11,874       |



## AAV / ROI Comparison

- AAV increases goodwill relative to VOBA
  - Implies higher future net income
- Goodwill difference between ROI and AAV methods due to cost of capital in this example
  - Goodwill difference  $600 - 92 =$  cost of capital
- Other differences exist to extent stat and tax reserve and asset values vary



## VOBA Amortization

- **Not a function of how initial VOBA is set**
- **Defined by EITF 92-9, same method used to amortize DAC**
- **SFAS 60:**
  - Amortize over premium
  - Interest rate = earned rate
  - VOBA pattern locked-in
- **SFAS 97 (and 120):**
  - Amortize over EGPs
  - Interest rate = credited rate
  - EGPs unlocked

**Recoverability must be established in similar manner as DAC**



## Reserves & VOBA: Impact on Earnings

- Future earnings influenced by initial level and growth pattern of reserves
- Higher initial reserves lead to higher intangible assets
- Range of assumptions and discount rate impact profit emergence
  - Conservative assumptions decrease initial VOBA
  - Higher discount rate decreases initial VOBA
  - Lower initial VOBA results in increased goodwill and increased future earnings



## PGAAP: Practical Issues

1. The “Fair” value of liabilities is not equal to AV for SFAS 97 business
2. Re-opening the initial balance sheet
3. Direct and complete consistency of assumptions and approaches between reserves and VOBA
4. Goodwill impairment test should be contemplated during the establishment of the opening B/S



## PGAAP: Practical Issue #1

- Fair value of SFAS 97 liabilities – emerging practice:
  - Fair value may be different for SFAS 97 than AV
  - Incorporate emerging fair value techniques
- Negative VOBA and/or poor amortization pattern
  - May occur, since assets marked-to-market, but reserve had normally been held at AV (i.e., guarantee of 6% assets earn 5%)
  - What to do? One option is to establish a reserve for the FV/BV difference in interest, then determine VOBA
    - Referred to as an 'excess interest reserve'
    - Amortize additional reserve to normalize expected margins



## PGAAP: Practical Issue #2

- Re-opening the initial PGAAP balance sheet:
  - Generally has been allowed by the SEC, under certain circumstances
    - Material error corrections
    - Certain information or system functionality not available at deal close date, in process and disclosed
  - Not allowed due to experience variations since the deal close date



## PGAAP: Other Practical Issues

**#3: Consistency between Reserves and VOBA**

- A critical and fundamental GAAP concept
- Think of VOBA as a 'contra-liability'
- Example – last minute reserve strengthening

**#4: Goodwill impairment test**

- Important to contemplate during establishment of the opening balance sheet
- Must know all levels at which the test will be required – may be standalone audits in addition to consolidated basis



## ***FASB Statement No. 141***

### **Business Combinations and Intangible Assets**



## Key Provisions – SFAS 141

- Defines a single approach for all business combinations
  - purchase accounting
- Disallows “pooling of interests”
  - Preserves current accounting rules for all prior poolings
- Sets rules for determining and allocating the cost of an acquired entity and other contingent considerations – use fair value
- Clarifies what is and is not a business combination



## What is a Business Combination?

- “A business combination occurs when:
  - an entity acquires net assets that constitute a business or
  - acquires equity interests of one or more other entities and obtains control over that entity or entities”
- Insurance business combinations
  - Purchase of common stock of a life insurance company or a life insurance holding company
  - Acquisition of net assets through:
    - coinsurance
    - assumption reinsurance
  - Merger of two life insurance companies



## Key Provisions – SFAS 141

- Recognition of more intangible assets
  - Acquired intangible assets be recognized apart from goodwill if they meet either of two criteria – legal and separability
  - Goodwill includes those intangibles that do not meet the legal/separability requirement
  - The majority of intangible assets continue to be amortized against earnings
  - Provides a list of examples of recognized intangible assets
- Broadens disclosure requirements, especially in year of purchase
- Effective for all business combinations (except if two or more mutual enterprises after combining) initiated after June 30, 2001



## ***FASB Statement No. 142***

### **Business Combinations and Intangible Assets**



## Key Provisions – SFAS 142

- Eliminates regular amortization of purchased goodwill
- Certain identifiable intangible assets will not be amortized
  - Intangible assets determined to have an indefinite useful life are not amortized
  - No minimum and maximum presumptions for the useful lives of identifiable intangible assets exist
- Requires amortization of recognized intangible assets that have a finite useful lifetime
- Requires allocation of all purchased assets and liabilities, including Goodwill, to “reporting units” (RU’s)
- (Paragraph 34) Goodwill shall be assigned to RU’s of acquirer that are expected to benefit from the synergies of the combination.



## Key Provisions – SFAS 142

- RU’s can be elements of acquiring company
- Requires impairment testing procedures to Goodwill and other intangible assets with indefinite useful lives be applied at least annually
  - Tests to be applied at the reporting unit level on a fair value basis
  - Impairment test differs based on whether identifiable intangible assets are non-amortizing or amortizing
- Establishes extensive disclosure requirements for goodwill, recognized intangible assets and impairment losses



## Testing Goodwill for Impairment

- A. Identify reporting units ("RU"): paragraph 30 – a business for which discrete financial information is available and management regularly reviews the operating results of that component.
- B. Allocate and perform annual impairment test
  - Test: assets, liabilities, and goodwill to reporting units
- C. Purchase price allocation two-step approach
  - Perform interim impairment test if there is an indication that the reporting unit's fair value may be below its carrying amount
  - If goodwill is impaired, record impairment charge in income from operations



## Goodwill (GW) Impairment Testing 2 Step Procedure

### Step 1

- Compare FV of reporting unit with carrying value amount (including goodwill)
  - If the fair value is less, proceed to Step 2
  - If greater, Goodwill is not impaired and no further testing is required

### Step 2

- Compare implied FV of Goodwill to its carrying amount
  - Record any excess of carrying value over implied FV as an impairment loss, and set carrying amount of Goodwill to implied FV
- Once written down for impairment, Goodwill cannot be reinstated



## Goodwill Impairment Testing 2 Step Procedure

### Step 2 (continued)

- “Implied FV” is calculated as if the RU has just been acquired, with the FV of the RU considered the “purchase price.” Any excess of this purchase price over the FV of amounts assigned to assets and liabilities of the RU is the implied FV of GW for the RU
  - Taken as a hypothetical acquisition at the valuation date
  - Assets and liabilities are stated at fair value
  - Implied FV of Goodwill is equal to FV of RU less net assets “acquired”
  - This process allows unrecognized intangibles to be considered



## Goodwill Impairment Test (Example 1)

| Reporting Unit Balance Sheet |                |              |                   |
|------------------------------|----------------|--------------|-------------------|
| Item                         | Carrying Value | Fair Value   | Recomputed P/GAAP |
|                              | GAAP BV        |              |                   |
| Invested Assets              | 1,250          | 1,250        |                   |
| DAC                          | 50             | -            |                   |
| VOBA                         | 200            | 323          |                   |
| Goodwill                     | 100            | 80           |                   |
| <b>Total Assets</b>          | <b>1,600</b>   | <b>1,653</b> |                   |
| Policy Liabilities           | 1,350          | 1,350        |                   |
| Deferred Tax                 | 50             | 93           |                   |
| <b>Total Liabilities</b>     | <b>1,400</b>   | <b>1,443</b> |                   |
| <b>Equity: RU Value</b>      | <b>200</b>     | <b>210</b>   |                   |

- Step 1 test
  - RU Fair Value 210
  - RU Carrying Value 200
- Excess of FV over
  - Carrying Value 10
- Potential impairment? NO



## Goodwill Impairment Test (Example 2)

| Reporting Unit Balance Sheet |                           |                                   |
|------------------------------|---------------------------|-----------------------------------|
| Item                         | Carrying Value<br>GAAP BV | Fair Value<br>Recomputed<br>PGAAP |
| Invested Assets              | 1,250                     | 1,250                             |
| DAC                          | 50                        | -                                 |
| VOBA                         | 200                       | 323                               |
| Goodwill                     | 100                       | 60                                |
| <b>Total Assets</b>          | <b>1,600</b>              | <b>1,633</b>                      |
| Policy Liabilities           | 1,350                     | 1,350                             |
| Deferred Tax                 | 50                        | 93                                |
| <b>Total Liabilities</b>     | <b>1,400</b>              | <b>1,443</b>                      |
| <b>Equity: RU Value</b>      | <b>200</b>                | <b>190</b>                        |

- Step 1 test
  - RU Fair Value 190
  - RU Carrying Value of RU 200
- Excess of FV over
  - Carrying Value <10>
- Potential impairment? YES



## Goodwill Impairment Test (Example 2)

- Step 2
  - Implied FV of GW 60
  - Carrying Value of GW 100
- Impairment Loss <40>



## Key Provisions – SFAS 142

### Annual Impairment Test

- Annual goodwill impairment test may be performed any time during fiscal year provided test is performed at the same time every year (i.e., one time selection for each RU)
- Different reporting units may be tested for impairment at different times
- Subsequent to the initial determination, entity may presume current FV of a reporting unit exceeds carrying value if all of the following criteria are met:
  - Assets and liabilities of reporting unit have not changed significantly
  - Previous computation of FV substantially exceeded carrying amounts
  - No adverse events that would indicate a likelihood that current FV has fallen below carrying amount



## Key Provisions – SFAS 142

### Interim Impairment Test

- May be required between annual tests if changes occur that more likely than not would reduce FV of RU
- Examples cited include:
  - Adverse changes in legal factors, regulation, competition, business climate, personnel
  - A “more-likely-than-not” expectation exists that a reporting unit (or significant portion) will be sold or otherwise disposed of
  - A subsidiary recognizes an impairment loss in its stand-alone GAAP financial statements



## SFAS 157 Fair Value Measurements



## SFAS 157 Key Provisions

- Defines fair value
  - “The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.”
- Establishes framework for measuring fair value in US GAAP
- Expands disclosures



## Measurement Terms

- Consider attributes specific to the asset or liability (paragraph 6)
- Orderly, but not forced transaction (paragraph 7)
- Principal market – market with greatest volume and level of activity (paragraph 8)
- Market participants – independent, knowledgeable, able and willing (paragraph 9)



## Valuation Techniques Appropriate for FV Calculations (Paragraph 18)

- Market – uses prices or other relevant market information for identical or comparable items
- Income – present value techniques, including items such as option pricing models, Black-Scholes or biannual model
- Cost – replacement cost of assets



## Use the Valuation Techniques that are (Paragraph 19)

- (a) Appropriate for the circumstance and
- (b) For which sufficient data are available



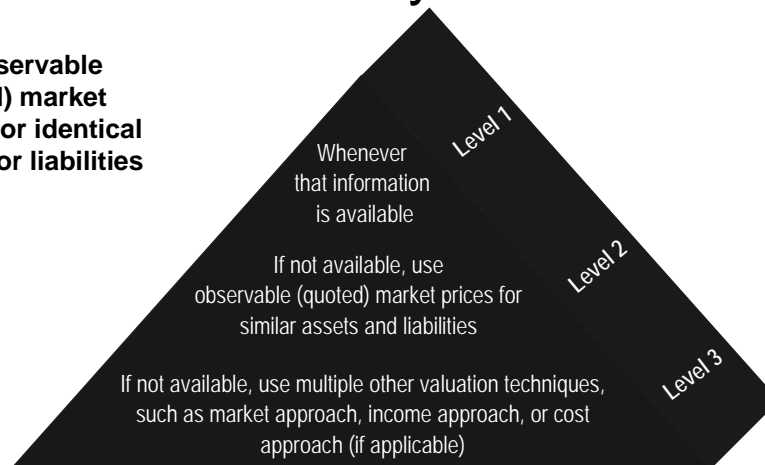
## Inputs to Valuation Techniques (paragraph 21)

- Are the assumptions used for pricing
- Observable – based on market data, independent of the reporting entity
- Unobservable – reflects reporting entity's own assumptions about what market participants would use



## Fair Value Hierarchy

Use observable  
(quoted) market  
prices for identical  
assets or liabilities  
...



## Effective Date

- For fiscal years beginning after November 15, 2007

